Knowledge in TOK

Knowledge is the raw material of the TOK course. It is important that students and teachers have a clear idea of what might be meant by the term "knowledge", however, this is not such a simple matter. Thinkers have wrestled with the problem of a simple definition of knowledge since before the time of Plato, without substantial consensus. How can we expect students to be able to tackle this question satisfactorily?

TOK is not intended to be a course in philosophy. While there might be a certain degree of overlap in the terms that are used, the questions that are asked, or the tools that are applied to answer these questions, the approach is really quite different. It is not a course of abstract analysis of concepts. TOK is designed to apply a set of conceptual tools to concrete situations encountered in the student's Diploma Programme subjects and in the wider world outside school. The course should therefore not be devoted to a technical philosophical investigation into the nature of knowledge.

It is useful for students to have a rough working idea of knowledge at the outset of the course. Towards the end of the course this picture will have become more rounded and refined. A useful metaphor for examining knowledge in TOK is a map. A map is a representation, or picture, of the world. It is necessarily simplified—indeed its power derives from this fact. Items not relevant to the particular purpose of the map are omitted. For example, one would not expect to see every tree and bush faithfully represented on a street map designed to aid navigation around a city—just the basic street plan will do. A city street map, however, is quite a different thing to a building plan of a house or the picture of a continent in an atlas. So knowledge intended to explain one aspect of the world, say, its physical nature, might look really quite different to knowledge that is designed to explain, for example, the way human beings interact.

Knowledge can be viewed as the production of one or more human beings. It can be the work of a single individual arrived at as a result of a number of factors including the ways of knowing. Such individual knowledge is called **personal knowledge** in this guide. But knowledge can also be the work of a group of people working together either in concert or, more likely, separated by time or geography. Areas of knowledge such as the arts and ethics are of this form. These are examples of **shared knowledge**. There are socially established methods for producing knowledge of this sort, norms for what counts as a fact or a good explanation, concepts and language appropriate to each area and standards of rationality. These aspects of areas of knowledge can be organized into a **knowledge framework**.

Shared and personal knowledge

In many languages, the verb "to know" has two first person forms: "I know" and "we know". "I know" refers to the possession of knowledge by an individual—personal knowledge. "We know" refers to knowledge that belongs to a group—shared knowledge. It can be useful in TOK to draw a distinction between these two forms of knowledge, as illustrated below.

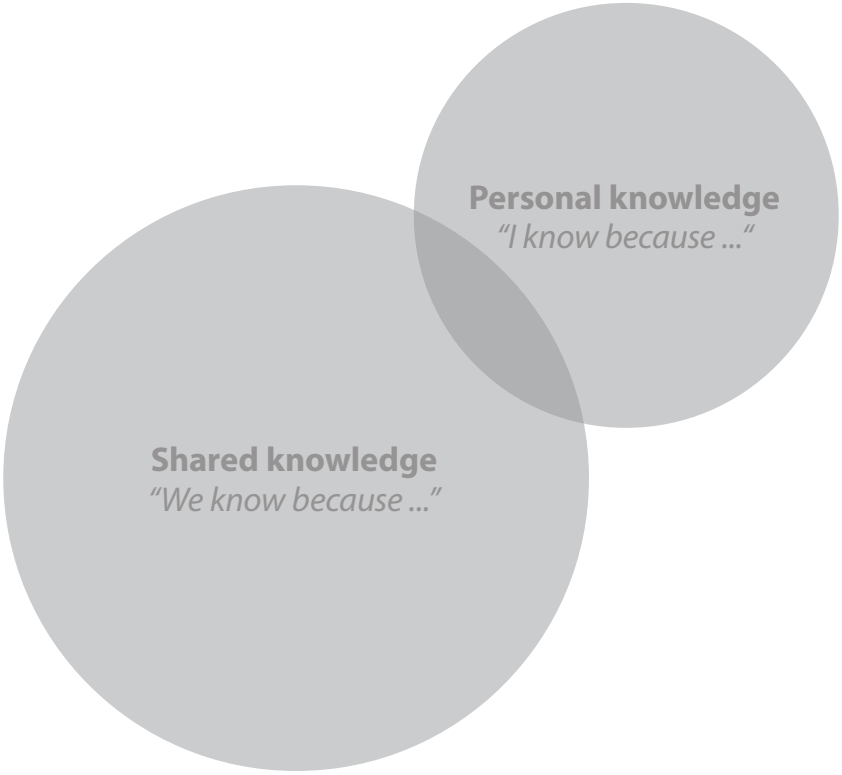

Figure 2

Shared knowledge

Shared knowledge is highly structured, is systematic in its nature and the product of more than one individual. Much of it is bound together into more or less distinct areas of knowledge such as the familiar groups of subjects studied in the Diploma Programme. While individuals contribute to it, shared knowledge does not depend only upon the contributions of a particular individual—there are possibilities for others to check and amend individual contributions and add to the body of knowledge that already exists.

Examples are easy to come by.

- Physics is a subject discipline with knowledge that is shared. Many have access to it and can contribute to it. Much of the work done is by teams of people building on existing knowledge. While individuals can and do contribute to this body of knowledge, the work of individuals is subject to group processes such as peer review and replication of experimental results before it becomes part of the corpus.
- The knowledge required to build a computer is also shared. It is unlikely that there is an individual who has the knowledge of building such a device from scratch (rather than simply assembling it from pre-constructed components). Yet we know how to make computers. A computer is the result of a complex worldwide cooperative effort.

Shared knowledge changes and evolves over time because of the continued applications of the methods of inquiry—all those processes covered by the knowledge framework. Applying the methodology belonging to an area of knowledge has the effect of changing what we know. These changes might be slow and incremental—areas of knowledge possess a certain stability over time. However, they could also be sudden and dramatic, revolutionary shifts in knowledge or paradigm shifts, as an area of knowledge responds to new experimental results, say, or advances in the underlying theory.

There might be areas of knowledge that are shared by all of us. The subjects studied in the Diploma Programme might fall into this category. Of course it is not the case that every IB student understands higher level biology or geography, but rather it is knowledge that is available subject to certain conditions.

We are all members of other smaller groups too. We are members of ethnic groups, national groups, age groups, gender groups, religious groups, interest groups, class groups, political groups, and so on. There might be areas of knowledge that we share as members of these groups which are not available to those outside, such as knowledge that is anchored in a particular culture or in a particular religious tradition. This might raise questions regarding the possibility of knowledge transgressing the boundaries of the group.

Here are some examples of such questions:

- Is it really possible to have knowledge of a culture in which we have not been raised?
- Are those outside a particular religious tradition really capable of understanding its key ideas?
- Does there exist a neutral position from which to make judgments about competing claims from different groups with different traditions and different interests?
- To what extent are our familiar areas of knowledge embedded in a particular tradition or to what extent might they be bound to a particular culture?

Thinking about shared knowledge allows us to think about the nature of the group that does the sharing. It allows international-mindedness into our exploration of knowledge questions.

Personal knowledge

Personal knowledge, on the other hand, depends crucially on the experiences of a particular individual. It is gained through experience, practice and personal involvement and is intimately bound up with the particular local circumstances of the individual such as biography, interests, values, and so on. It contributes to, and is in turn influenced by, an individual's personal perspective.

Personal knowledge is made up of:

- skills and procedural knowledge that I have acquired through practice and habituation
- what I have come to know through experience in my life beyond academia
- what I have learned through my formal education (mainly shared knowledge that has withstood the scrutiny of the methods of validation of the various areas of knowledge)
- the results of my personal academic research (which may have become shared knowledge because I published it or made it available in some other way to others).

Personal knowledge therefore includes what might be described as skills, practical abilities and individual talents. This type of knowledge is sometimes called procedural knowledge, and refers to knowledge of **how** to do something, for example, how to play the piano, how to cook a soufflé, how to ride a bicycle, how to paint a portrait, how to windsurf, how to play volleyball and so on.

Compared to shared knowledge, personal knowledge is often more difficult to communicate to others. Sometimes it has a stronger linguistic component and is communicable to others, but often it cannot easily be shared. For example, an experienced tea taster who has developed their palette through years of experience of tasting different teas will have a complex knowledge of tea tastes. But the tea taster might find it difficult to describe the taste of a particular tea in words in a way that can be understood by others. The taster might use metaphor and simile to try to relate the experience of drinking this tea to others but the task is a difficult one. In this way personal knowledge is frequently characterized by this difficulty in sharing.

Personal knowledge also includes a map of our personal experiences of the world. It is formed from a number of ways of knowing such as our memories of our own biography, the sense perceptions through which we gain knowledge of the world, the emotions that accompanied such sense perceptions, the values and significance we place on such thoughts and feelings.

Like shared knowledge, personal knowledge is not static, but changes and evolves over time. Personal knowledge changes in response to our experiences. What is known by an 18-year-old could be quite different to what he or she knew at only 6 years of age. The various ways of knowing covered in the TOK course contribute to these changes.

Links between shared and personal knowledge

Clearly there are links and interactions between shared knowledge and personal knowledge. These are discussed in more depth in the knowledge framework.

Consider the example of a scientist such as Albert Einstein who has contributed much to modern physics. Clearly, he had some personal qualities that enabled him to see further than some of his peers. He had personal knowledge, a way of looking at things perhaps, that he was able to use to propel his exploration of the difficult questions that characterized the physics of the early 20th century. But his insights had to go through a thorough process of review before being accepted as part of the shared body of knowledge that is the discipline of physics.

There were disciplinary-specific methods that placed demands on Einstein's thought. For example, his ideas had to be logically consistent, had to conform to previous experimental findings and had to go through a process of peer review. They also had to provide predictions that could be independently tested and verified (for example, the predictions made about the visibility of stars normally obscured by the sun in the solar eclipse of 1919). Only then could Einstein's vision become an accepted part of physics. This illustrates how personal knowledge leads to advances in shared knowledge.

The reverse process can and does occur. Shared knowledge can have a big effect on our personal view of the world. Not only do the familiar areas of knowledge impinge on our personal experiences—someone studying economics might regard everyday shopping in a different light as a result of studying economics—but shared knowledge as membership of our cultural, ethnic, gender and other groups might influence our world view. This is what we call perspective. Membership of such groups provides a horizon against which the significance of the events of our lives is measured. Acknowledgment of such perspectives is an important goal of the TOK course.

From an individual perspective, shared knowledge often appears in the form of an authority—a source of knowledge whose justification is not immediately available to the individual. An example here is the authority of medical science to the patient who is not trained in medicine.

Balance between shared and personal knowledge

It is important that the TOK course reflects the balance between shared knowledge and personal knowledge. Too much emphasis on the personal at the expense of the shared is likely to result in a course that is oriented towards the subjective experiences of the students and does not look at knowledge beyond the individual to how knowledge is constructed in the wider world. There is a tendency for such a course to become a succession of personal anecdotes strung together with little or no analysis.

Biasing the course in the opposite direction risks losing the important links between the areas of knowledge and the individual knower. Shared knowledge has a significance and value for the individual that gives it relevance and importance. There is a danger that such a TOK course could become too arid and fact-oriented. Making the distinction central to the course brings the balance of these two elements to the forefront.

The ideal balance might not be 50:50; it is likely that significantly less time will be spent on personal knowledge and more on shared knowledge. It is also likely that the best strategy is not to teach them entirely separately. It seems difficult to examine areas of knowledge without considering the impact on individual knowers. Similarly, it seems difficult to examine personal knowledge in a vacuum without acknowledging that as individuals we are embedded in a web of social relationships.